

XII. *An Account of a remarkable Tide at Bristol : In a Letter to the Rev. Thomas Birch, D. D. Secret. R. S. from the Rev. Josiah Tucker, D. D. Dean of Gloucester.*

Read Feb. 23,
1764.

ON Saturday the 11th instant, when the tide had hardly begun to flow, according to it's regular course, it was observed, by the water-bailif of the city, and by several others, both on the back, and at the key, to rise very suddenly to almost high-water mark ; and it so continued for near half an hour : then it sunk, almost instantaneously, three feet perpendicular : after that, it began to flow in again, and kept flowing on till one of the clock, and rose to the height it was expected to do.

At Rownham Passage, a mile below the city, the ferry-men observed the tide to ebb almost instantaneously, and to sink at least four feet perpendicular. Then it flowed in again, as it should have regularly done.

At King-Road, which is about three miles below the city, the officers observed the king's boat to float suddenly, which they attributed to a great fresh coming. But they found afterwards the boat presently aground.

I could get no intelligence of any thing observable, that happened in the river Severn, excepting that at Gloucester, and at Worcester, the inundation sunk very

very fast on that day. But most undoubtedly the strong rapid tide of the Severn must have been affected in a very remarkable manner, had there been any curious persons to take notice of it.

XIII. *A Letter containing some Experiments in Electricity, to Mr. Benjamin Wilfon, F. R. S. from Mr. Torbern Bergman, of Upsal, in Sweden.*

Amplissime atque celeberrime domine,

Read Feb. 23, 1764. **E**Xperimentorum circa corporum adfrictum jam ea sunt commemoranda, quæ cum serico institui; cujus vis electrica, etsi a domino Gray dudum inventa, tamen hucusque parum fuit explorata. Pulchra sunt quæ adtulit dominus Symmer; sed non sufficientia. Ne vero longa narratione variorum tentaminum charta impleatur; palmaria tantum, et e quibus reliqua intelligi possunt, adferam. Nova ligamenta sericea, unum circiter pollicem geometricum Suecanum lata, adhibui. Alterum extremitatibus fixum et bene tensum, quod in posterum *fricatum* voco, alterum vero seu *fricans* manibus, quantum satis, expando, super eodem spatio fricati pluries duco reducoque perpendiculariter ad ejus longitudinem. Hanc operationem *transversam* adpello: eam vero qua idem spatium fricantis ducitur antrosum retrorsumque, super tota longitudine fricati, *secundum longitudinem* fieri dico.

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